17625



# 4° OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/039,847A

DATE: 07/02/2002 TIME: 10:15:46

Input Set : A:\00-100.txt

Output Set: N:\CRF3\07022002\J039847A.raw

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	7	\1 <b>Z</b> 0>		NEY														
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	30	cago	gcga	age g	gcago	cggc	g ag	gage	cago	ggc	ggcgc	egge	gte	ggtee	cy c	ggage	cagaac	237
	31	ccgg	cttt	ttt (	cttgg	gagc	ja c <u>e</u>	jctgi	CCC	c agi	Lege	Lyai	CCCc	ia ai	.y co	ie A	gg ctc rg Leu	237
	32													Me		LO A	ly neu	
	33	- 4		gtc	+	- a+	at a	2+0	+~~	~~~	220	+++	tac	_	-	caa	gac	. 285
	35 36	Tlo	Dho	Val	Tur	Thr	Len	Tlo	Cve	Δla	Agn	Phe	Cvs	Ser	Cvs	Ara	Asp	
	37	5	PHE	vai	ıyı	1111	10	110	Cys	niu	21011	15	0,15	501	0,2	5	20	
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	40	Thr	Ser	Ala	Thr	Pro	Gln	Ser	Ala	Ser	Ile	Lvs	Ala	Leu	Arq	Asn	Ala	
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	45	Asn	Leu	Arg	Ara	Asp	Glu	Ser	Asn	His	Leu	Thr	Asp	Leu	Tyr	Arg	Arg	
	46			5	40					45			_		50	_		
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62 64 65	gaa Glu	gat Asp	ata Ile	tcc Ser	105 gaa Glu	acc Thr	agt Ser	acc Thr	att Ile	att	aga Arg	gga Gly	cga Arg	Trp	tgt	gga Gly	621
66 68	cac	aag	gaa	120 gtt	cct Pro	cca	agg	ata	125 aaa	tca	aga Arg	acg Thr	aac Asn	130 caa Gln	att Ile	aaa Lvs	669
69 70			135					140					145				717
72 73	atc Ile	Thr	ttc Phe	aag Lys	tcc Ser	Asp	Asp	Tyr	Phe	Val	Ala	Lys 160	Pro	Gly	Phe	Lys	
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77 78	165				Leu	170					175					180	
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85 86	Ser	Pro	Ser	Val 200	Thr	Asp	Pro	Thr	Leu 205	Ile	Ala	Asp	Ala	Leu 210	Asp	гĀг	
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91 93	cca	ααα	215 t.ca	t.aa	caa	gaa	gat	220 ctt	gag	aat	atg	tat	225 ctg	gac	acc	cct	957
94 95	Pro	Glu 230	Ser	Trp	Gln	Glu	Asp 235	Leu	Glu	Asn	Met	Tyr 240	Leu	Asp	Thr	Pro	
97 98	cgg Arg	tat Tvr	cga Arq	ggc Gly	agg Arg	tca Ser	tac Tyr	cat His	gac Asp	cgg Arg	aag Lys	tca Ser	aaa Lys	gtt Val	gac Asp	ьeu	•
99 101	245				t ga	250					255	5				260	
102 103	As	p Ar	g Le	u As	n As	p As	p Ål	а Lу	s Ar	g Ty 27	r Se	er Cy	s Th	r Pr	o Ar 27	g As	n
105 105	ta	c to	g gt	.c aa	t at	a aq	a ga o Gl	a ga u Gl	g ct u Le	g aa u Ly	g tt	g go eu Al	c aa a As	t gt n Va	g gt	c tt	ic 1101 ie
107	_			28					28	5				29	0		
109 110	Ph	e Pr	o Ar	g Cy	s Le	u Le	u Va	1 G1	n Ar	g Cy	rs G	Ly Gl	y As 30	ın Cy	s Gl	у Су	's
111 113	αa	a ac	29 t gt:	c aa	ıc tg	g ag	g to	30 c tg	c ac	a to	jc aa	at to	a gg	g aa	a ac	c gt	g 1197
114 115		31	0		n Tr		31	5				32	20				
117 118	aa	a aa	or ta	it ca or Hi	it ga .s Gl	g gt u Va	a tt l Le	a ca u Gl	g tt n Ph	t ga ne Gl	ig co Lu Pi	ct gg ro Gl	jc ca Ly Hi	c at s Il	c aa Le Ly	ng ag 7s Ai	gg 1245 cg
119 121	3.2	5			t aa	33	0				3.	35				34	10
122	Ar	g Gl	y Ai	g Al	La Ly 34	s Th	r Me	t Al	a Le	eu Va	al A:	sp I	Le Gl	n Le	eu As	вр Ні 55	is
123 125	Cā	ıt ga	aa cg	ga to	ge ga		t at	c to	jc aç			ga co	ca co	et ce			1338

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127 129	a a a a	atat	ac a		otta	c at	taad	reeto		gaac	ctt	tagt	ttaa		agat	gagat	1398
130	2242	acyc	ot t	++cc	tacc	ים מנ	aacc	aaac	tta	ctac	taσ	cctq	caat	gc a	atga	acaca	1458
131	aaya	ratta	rat a	anto	tcac	ic ct	tact	ttat	taa	tacc	atσ	gcaa	gtag	iaa a	agta	tatca	1518
132	49 L9	2++	ita t	aget	aana	a ta	tago	atto	cat	ttaa	taa	tagt	attt	ga d	ratta	tatat	1578
132	ccaa	1222	, La L	.0202	raas	it at	atto	atat	cta	tata	tat	ataq	atca	aa t	attt	ttttt	1638
	4+++	aaa	.ac a	2+22	ocac	ra ta	Cacc	agag	att	acat	ato	ttto	agtt	ag a	ctct	taaaa	· 1698
134	taat	.99.00	ica c	acuc	anno	ra to	rates	aata	tat	σааа	cat	at.ct	ttac	raa a	attt	aggag	1758
135	2001		:::a a	+++=	iayyy	t to	raaac	acas	1 220	aatt	tta	aato	ttac	tc t	ctta	aagaa	1818
136	alad	1d L L l	at t	+ = + +		a to	12222	racyc	anc	icttt	ctt	acat	atac	at c	ttac	ttgat	1878
137			.gc a	llali	aaac	ia cc	Jauac	iguc	, 495	,000	.000					, ,	1882
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	<211><212>				,												
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147	1	<b>G</b>	Arg	7 an	mb~	Cor	λ1 a	Thr	Dro		gor	Δla	Ser	Tle		Ala	
148	ser	Cys	Arg	20	THE	261	AIG	TIIT	25	GIII	Del	niu	001	30	<b>-12</b>		
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152	Leu	_	Arg	Arg	ASP	GIU	55	TIE	GIII	Val	БУЗ	60	non	017	-1-	,	
153	<b>6</b> 3.	50	D	3	Dha	Dwo		C02	Патт	Dro	λκα		T.e.ii	T.em	T.e.ii	Thr	
154		ser	Pro	Arg	Pne		ASII	Ser	TYT	PIO	75	NO11	ЦСи	Deu	Dea	80	
155	65	•	Leu	TT 4	0	70	C111	7 an	Thr	λνα		Gln	T.011	Va 1	Phe	-	
156	Trp	Arg	ьeu	HIS	85	GIII	GIU	ASII	1111	90	116	GIII	Dea	, ar	95	p	
157		a1	Phe	<b>a</b> 1		C1	C1.,	ת 1 ת	Clu		λen	Tla	Cvc	Δrσ		Asp	
158	Asn	GIn	Pne		ьeu	GIU	GIU	нта	105	ASII	изр	116	CYS	110	-1-	p	
159	<b>5</b> 1	77- 7	Glu	100	<b>61.</b>	7 an	т1 о	Cor		Thr	Sor	Thr	Tla		Arσ	Glv	•
160	Pne	vaı		vaı	GIU	Asp	TTE	120	GIU	1111	Ser	1111	125	110	**** 9	011	
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163		130	Ile	T	т1 о	mh w		Two	Cor	N en	λen		Dho	Val	Δla	Lvs	
164		GIn	TTE	ьуѕ	тте		Pile	пуъ	Ser	rsb	155	- y -	riic	141	1114	160	
165	145	a1	Phe	T	71.0	150	М	cor	T 011	LON		Aen	Dho	Gln	Pro		
166		GTĀ	Pne	гаг		тут	TAT	Ser	пец	170	GIU	rob	riic		175		
167			a	a1	165	7.00	m ~~	Clu	Cor		Thr	Sar	Sar	Tle		Glv	
168		Ala	Ser		THE	ASII	тър	GIU	185	Val	1111	261	SET	190	DCI	017	
169	1	_		180	a	D	C = m	375.1			Dro	mhr	Ton			Δen	
170		Ser	Tyr	Asn	ser	Pro	ser			ASP	PIO	1111	205		AIG	пър	
171		_	195 Asp	<b>.</b>	T	71.	71.	200		) an	mb~	v-1			Τ.Δ11	T.Ou	
173				ьys	гàг	TTE			Pile	ASP	1111	220		vob	пец	пец	
174		210	_,			a1	215		<b>01</b> =	<b>61.</b>	n an			λan	Mot	Фиг	
175	-	_	Phe	ASN	Pro			тгр	GTU	GIU	235		GIU	UDII	MEC	240	
176	225		m1	D	<b>3</b>	230		<b>C1</b>	7 ~~	C^~			λαν	λνα	T.376		
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178					245					250					233		

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181	Thr	Pro	_	Asn	Tyr	Ser	Val		Ile	Arg	GLU	GLU		гàг	Leu	Ald	
182			275				_	280	_	_	1		285		<b>a</b> 1	<b>61</b>	
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206 207	gagg	caace	grg o	atcc	gaaa	at co	actq	agec	c aa	atg	caa	cgg	ctc	gtt	tta	gtc	113
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207 208 209	gag	caac	gcg a	atcc	ctag	gt c	gctga	agcc	c aa	atg Met 1	caa Gln	cgg Arg	ctc Leu	gtt Val 5	tta Leu	gtc Val	
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207 208 209 211 212	gago	caac	geg a	ctg	tgc	gt co	gctga aac	agcc:	c aa	atg Met 1 tgc	caa Gln tat	cgg Arg ccg	ctc Leu gac	gtt Val 5 act	tta Leu ttt	gtc Val gcg	113
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207 208 209 211 212 213 216 217	tcc Ser	att Ile ccg Pro	ctc Leu 10 cag	ctg Leu aga	tgc Cys gca	gt co gcg Ala tcc	aac Asn atc	ttt Phe 15 aaa	agc Ser	atg Met 1 tgc Cys	caa Gln tat Tyr	cgg Arg ccg Pro	ctc Leu gac Asp 20 gcc	gtt Val 5 act Thr	tta Leu ttt Phe ctc	gtc Val gcg Ala ·	113 161
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207 208 209 211 212 213 216 217 218 220	tcc Ser act Thr	att Ile ccg Pro 25	ctc Leu 10 cag Gln	ctg Leu aga Arg	tgc Cys gca Ala	gcg Ala tcc Ser	aac Asn atc Ile 30	ttt Phe 15 aaa Lys	agc Ser gct Ala	atg Met 1 tgc Cys ttg Leu ttg	caa Gln tat Tyr cgc Arg	cgg Arg ccg Pro aat Asn 35 cag	gac Asp 20 gcc Ala	gtt Val 5 act Thr aac Asn	tta Leu ttt Phe ctc Leu gag	gtc Val gcg Ala · agg Arg	<ul><li>113</li><li>161</li><li>209</li></ul>
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207 208 209 211 212 213 216 217 218 220 221 222	tcc Ser act Thr aga Arg	att Ile ccg Pro 25 gat Asp	ctc Leu 10 cag Gln gag Glu	ctg Leu aga Arg agc ser	tgc Cys gca Ala aat	gcg Ala tcc Ser cac His 45	aac Asn atc Ile 30 ctc Leu	ttt Phe 15 aaa Lys aca	agc Ser gct Ala gac Asp	Met 1 tgc Cys ttg Leu ttg	caa Gln tat Tyr cgc Arg tac Tyr 50	cgg Arg ccg Pro aat Asn 35 cag Gln	gac Asp 20 gcc Ala aga Arg	gtt Val 5 act Thr aac Asn gag Glu	tta Leu ttt Phe ctc Leu gag Glu	gtc Val gcg Ala · agg Arg aac Asn 55	<ul><li>113</li><li>161</li><li>209</li></ul>
207 208 209 211 212 213 216 217 218 220 221 222 224	tcc Ser act Thr aga Arg 40	att Ile ccg Pro 25 gat Asp	ctc Leu 10 cag Gln gag Glu	ctg Leu aga Arg agc ser	tgc Cys gca Ala aat Asn	gcg Ala tcc Ser cac His 45	aac Asn atc Ile 30 ctc Leu	ttt Phe 15 aaa Lys aca Thr	agc ser gct Ala gac Asp	Met 1 tgc Cys ttg Leu ttg Leu cag	caa Gln tat Tyr cgc Arg tac Tyr 50 agt	cgg Arg ccg Pro aat Asn 35 cag Gln	gac Asp 20 gcc Ala aga Arg	gtt Val 5 act Thr aac Asn gag Glu	tta Leu ttt Phe ctc Leu gag Glu ccg	gtc Val gcg Ala · agg Arg aac Asn 55 aac	<ul><li>113</li><li>161</li><li>209</li><li>257</li></ul>
207 208 209 211 212 213 216 217 218 220 221 222 224 225	tcc Ser act Thr aga Arg 40	att Ile ccg Pro 25 gat Asp	ctc Leu 10 cag Gln gag Glu	ctg Leu aga Arg agc ser	tgc Cys gca Ala aat Asn agc	gcg Ala tcc Ser cac His 45	aac Asn atc Ile 30 ctc Leu	ttt Phe 15 aaa Lys aca Thr	agc Ser gct Ala gac Asp	Met 1 tgc Cys ttg Leu ttg Leu cag	caa Gln tat Tyr cgc Arg tac Tyr 50 agt	cgg Arg ccg Pro aat Asn 35 cag Gln	gac Asp 20 gcc Ala aga Arg	gtt Val 5 act Thr aac Asn gag Glu	tta Leu ttt Phe ctc Leu gag Glu ccg	gtc Val gcg Ala · agg Arg aac Asn 55 aac	<ul><li>113</li><li>161</li><li>209</li><li>257</li></ul>
207 208 209 211 212 213 216 217 218 220 221 222 224 225 226	tcc Ser act Thr aga Arg 40 att	att Ile ccg Pro 25 gat Asp cag	ctc Leu 10 cag Gln gag Glu gtg Val	ctg Leu aga Arg agc Ser aca	tgc Cys gca Ala aat Asn agc Ser 60	gcg Ala tcc Ser cac His 45 aat	aac Asn atc Ile 30 ctc Leu ggc Gly	ttt Phe 15 aaa Lys aca Thr	agc ser gct Ala gac Asp gtg Val	atg Met 1 tgc Cys ttg Leu ttg Leu cag Gln 65	caa Gln tat Tyr cgc Arg tac Tyr 50 agt Ser	cgg Arg ccg Pro aat Asn 35 cag Gln cct	gac Asp 20 gcc Ala aga Arg cgc	gtt Val 5 act Thr aac Asn gag Glu ttc Phe	tta Leu ttt Phe ctc Leu gag Glu ccg Pro 70	gtc Val gcg Ala agg Arg aac Asn 55 aac Asn	<ul><li>113</li><li>161</li><li>209</li><li>257</li></ul>
207 208 209 211 212 213 216 217 218 220 221 222 224 225 226 228	tcc Ser act Thr aga Arg 40 att Ile	att Ile ccg Pro 25 gat Asp cag Gln	ctc Leu 10 cag Gln gag Glu gtg Val	ctg Leu aga Arg agc Ser aca Thr	tgc Cys gca Ala aat Asn agc Ser 60 aac	gcg Ala tcc Ser cac His 45 aat Asn	aac Asn atc Ile 30 ctc Leu ggc Gly	ttt Phe 15 aaa Lys aca Thr cat	agc Ser gct Ala gac Asp gtg Val	atg Met 1 tgc Cys ttg Leu ttg Leu cag Gln 65	caa Gln tat Tyr cgc Arg tac Tyr 50 agt ser	cgg Arg ccg Pro aat Asn 35 cag Gln cct Pro	gac Asp 20 gcc Ala aga Arg cgc Arg	gtt Val 5 act Thr aac Asn gag Glu ttc Phe	tta Leu ttt Phe ctc Leu gag Glu ccg Pro 70 cag	gtc Val gcg Ala agg Arg aac Asn 55 aac Asn	<ul><li>113</li><li>161</li><li>209</li><li>257</li><li>305</li></ul>
207 208 209 211 212 213 216 217 218 220 221 222 224 225 226 228 229	tcc Ser act Thr aga Arg 40 att Ile	att Ile ccg Pro 25 gat Asp cag Gln	ctc Leu 10 cag Gln gag Glu gtg Val	ctg Leu aga Arg agc ser aca Thr	tgc Cys gca Ala aat Asn agc Ser 60 aac	gcg Ala tcc Ser cac His 45 aat Asn	aac Asn atc Ile 30 ctc Leu ggc Gly	ttt Phe 15 aaa Lys aca Thr cat	agc Ser gct Ala gac Asp gtg Val aca	atg Met 1 tgc Cys ttg Leu ttg Leu cag Gln 65	caa Gln tat Tyr cgc Arg tac Tyr 50 agt ser	cgg Arg ccg Pro aat Asn 35 cag Gln cct Pro	gac Asp 20 gcc Ala aga Arg cgc Arg	gtt Val 5 act Thr aac Asn gag Glu ttc Phe	tta Leu ttt Phe ctc Leu gag Glu ccg Pro 70 cag	gtc Val gcg Ala agg Arg aac Asn 55 aac Asn	<ul><li>113</li><li>161</li><li>209</li><li>257</li><li>305</li></ul>
207 208 209 211 212 213 216 217 218 220 221 222 224 225 226 228 229 230	tcc Ser act Thr aga Arg 40 att Ile agc Ser	att Ile CCG Pro 25 gat Asp Cag Gln tac	ctc Leu 10 cag Gln gag Glu gtg Val cca Pro	ctg Leu aga Arg agc Ser aca Thr agg Arg	tgc Cys gca Ala aat Asn agc Ser 60 aac Asn	gcg Ala tcc Ser cac His 45 aat Asn ctg Leu	aac Asn atc Ile 30 ctc Leu ggc Gly	ttt Phe 15 aaa Lys aca Thr cat His	agc Ser gct Ala gac Asp gtg Val aca Thr	atg Met 1 tgc Cys ttg Leu ttg Gln 65 tgg	caa Gln tat Tyr cgc Arg tac Tyr 50 agt ser tgg	cgg Arg ccg Pro aat Asn 35 cag Gln cct Pro	gac Asp 20 gcc Ala aga Arg cgc Arg	gtt Val 5 act Thr aac Asn gag Glu ttc Phe tcc Ser 85	tta Leu ttt Phe ctc Leu gag Glu ccg Pro 70 cag Gln	gtc Val gcg Ala agg Arg aac Asn 55 aac Asn gag Glu	<ul><li>113</li><li>161</li><li>209</li><li>257</li><li>305</li></ul>
207 208 209 211 212 213 216 217 218 220 221 222 224 225 226 228 229 230 232	tcc Ser act Thr aga Arg 40 att Ile agc Ser aaa	att Ile CCG Pro 25 gat Asp Cag Gln tac Tyr	ctc Leu 10 cag Gln gag Glu gtg Val cca Pro	ctg Leu aga Arg agc ser aca Thr agg Arg	tgc Cys gca Ala aat Asn agc Ser 60 aac Asn	gcg Ala tcc Ser cac His 45 aat Asn ctg Leu	aac Asn atc Ile 30 ctc Leu ggc Gly ctt Leu	ttt Phe 15 aaa Lys aca Thr cat His ctg Leu	agc Ser gct Ala gac Asp Val aca Thr 80 gac	atg Met 1 tgc Cys ttg Leu ttg Leu cag Gln 65 tgg Trp	caa Gln tat Tyr cgc Arg tac Tyr 50 agt Ser tgg Trp	cgg Arg ccg Pro aat Asn 35 cag Gln cct Pro ctc Leu	gac Asp 20 gcc Ala aga Arg cgc Arg gga	gtt Val 5 act Thr aac Asn gag Glu ttc Phe tcc ser 85 cta	tta Leu ttt Phe ctc Leu gag Glu ccg Pro 70 cag Gln gag	gtc Val gcg Ala · agg Arg aac Asn 55 aac Asn gag Glu	<ul><li>113</li><li>161</li><li>209</li><li>257</li><li>305</li><li>353</li></ul>
207 208 209 211 212 213 216 217 218 220 221 222 224 225 226 228 229 230 232 233	tcc Ser act Thr aga Arg 40 att Ile agc Ser aaa	att Ile CCG Pro 25 gat Asp Cag Gln tac Tyr	ctc Leu 10 cag Gln gag Glu gtg Val cca Pro	ctg Leu aga Arg agc ser aca Thr agg Arg	tgc Cys gca Ala aat Asn agc Ser 60 aac Asn	gcg Ala tcc Ser cac His 45 aat Asn ctg Leu	aac Asn atc Ile 30 ctc Leu ggc Gly ctt Leu	ttt Phe 15 aaa Lys aca Thr cat His ctg Leu ttt	agc Ser gct Ala gac Asp gtg Val aca Thr	atg Met 1 tgc Cys ttg Leu ttg Leu cag Gln 65 tgg Trp	caa Gln tat Tyr cgc Arg tac Tyr 50 agt Ser tgg Trp	cgg Arg ccg Pro aat Asn 35 cag Gln cct Pro ctc Leu	gac Asp 20 gcc Ala aga Arg cgc Arg gga	gtt Val 5 act Thr aac Asn gag Glu ttc Phe tcc ser 85 cta	tta Leu ttt Phe ctc Leu gag Glu ccg Pro 70 cag Gln gag	gtc Val gcg Ala · agg Arg aac Asn 55 aac Asn gag Glu	<ul><li>113</li><li>161</li><li>209</li><li>257</li><li>305</li><li>353</li></ul>
207 208 209 211 212 213 216 217 218 220 221 222 224 225 226 228 229 230 232 233 234	tcc Ser act Thr aga Arg 40 att Ile agc Ser aaa Lys	att Ile ccg Pro 25 gat Asp cag Gln tac Tyr aca	ctc Leu 10 cag Gln gag Glu gtg Val cca Pro cgg Arg	ctg Leu aga Arg agc Ser aca Thr agg Arg 75 ata Ile	tgc Cys gca Ala aat Asn agc Ser 60 aac Asn caa Gln	gcg Ala tcc Ser cac His 45 aat Asn ctg Leu	aac Asn atc Ile 30 ctc Leu ggc Gly ctt Leu tcc Ser	ttt Phe 15 aaa Lys aca Thr cat His ctg Leu ttt Phe 95	agc Ser gct Ala gac Asp Val aca Thr 80 gac Asp	atg Met 1 tgc Cys ttg Leu ttg Gln 65 tgg Trp	caa Gln tat Tyr cgc Arg tac Tyr 50 agt Ser tgg Trp	cgg Arg ccg Pro aat Asn 35 cag Gln cct Pro ctc Leu	gac Asp 20 gcc Ala aga Arg cgt Arg gga Gly 100	gtt Val 5 act Thr aac Asn gag Glu ttc Phe tcc Ser 85 cta Leu	tta Leu ttt Phe ctc Leu gag Glu ccg Pro 70 cag Gln gag Glu	gtc Val gcg Ala agg Arg aac Asn 55 aac Asn gag Glu gaa Glu	<ul><li>113</li><li>161</li><li>209</li><li>257</li><li>305</li><li>353</li></ul>
207 208 209 211 212 213 216 217 218 220 221 222 224 225 226 228 229 230 232 233 234 236	tcc Ser act Thr aga Arg 40 att Ile agc Ser aaa Lys	att Ile ccg Pro 25 gat Asp cag Gln tac Tyr aca Thr	ctc Leu 10 cag Gln gag Glu gtg Val cca Pro cgg Arg aat	ctg Leu aga Arg agc Ser aca Thr agg Arg 75 ata Ile	tgc Cys gca Ala aat Asn agc Ser 60 aac Asn caa Gln	gcg Ala tcc Ser cac His aat Asn ctg Leu ctg	aac Asn atc Ile 30 ctc Leu ggc Gly ctt Leu tcc Ser	ttt Phe 15 aaa Lys aca Thr cat His ctg Leu ttte 95 tat	agc ser gct Ala gac Asp Val aca Thr 80 gac Asp gac	atg Met 1 tgc Cys ttg Leu ttg Gln 65 tgg Trp cat His	caa Gln tat Tyr cgc Arg tac Tyr 50 agt ser tgg Trp caa Gln	cgg Arg ccg Pro aat Asn 35 cag Gln cct Pro ctc Leu ttc Phe gaa	gac Asp 20 gcc Ala aga Arg cgt Arg gga Gly 100 gtt	gtt Val 5 act Thr aac Asn gag Glu ttc Phe tcc Ser cta Leu	tta Leu ttt Phe ctc Leu gag Glu ccg Pro 70 cag Gln gag Glu gaa	gtc Val gcg Ala . agg Arg aac Asn 55 aac Asn gag Glu gaa Glu	113 161 209 257 305 353 401
207 208 209 211 212 213 216 217 218 220 221 222 224 225 226 228 229 230 232 233 234	tcc Ser act Thr aga Arg 40 att Ile agc Ser aaa Lys	att Ile ccg Pro 25 gat Asp cag Gln tac Tyr aca Thr	ctc Leu 10 cag Gln gag Glu gtg Val cca Pro cgg Arg aat	ctg Leu aga Arg agc Ser aca Thr agg Arg 75 ata Ile	tgc Cys gca Ala aat Asn agc Ser 60 aac Asn caa Gln	gcg Ala tcc Ser cac His aat Asn ctg Leu ctg	aac Asn atc Ile 30 ctc Leu ggc Gly ctt Leu tcc Ser	ttt Phe 15 aaa Lys aca Thr cat His ctg Leu ttte 95 tat	agc Ser gct Ala gac Asp Val aca Thr 80 gac Asp	atg Met 1 tgc Cys ttg Leu ttg Gln 65 tgg Trp cat His	caa Gln tat Tyr cgc Arg tac Tyr 50 agt ser tgg Trp caa Gln	cgg Arg ccg Pro aat Asn 35 cag Gln cct Pro ctc Leu ttc Phe gaa	gac Asp 20 gcc Ala aga Arg cgt Arg gga Gly 100 gtt	gtt Val 5 act Thr aac Asn gag Glu ttc Phe tcc Ser cta Leu	tta Leu ttt Phe ctc Leu gag Glu ccg Pro 70 cag Gln gag Glu gaa	gtc Val gcg Ala . agg Arg aac Asn 55 aac Asn gag Glu gaa Glu	113 161 209 257 305 353 401

RAW SEQUENCE LISTING

DATE: 07/02/2002 TIME: 10:15:46 PATENT APPLICATION: US/10/039,847A

Input Set : A:\00-100.txt
Output Set: N:\CRF3\07022002\J039847A.raw

240	tca	gag	agc	agc	act	gtt	gtc	aga	gga	aga	tgg	tgt	ggc	cac	aag	gag	497
241		Glu	Ser	Ser	Thr		Val	Arg	Gly	Arg		Cys	Gly	His	Lys		
242	120					125	+		202	224	130	2++	222	ato	202	135	545
244	atc	CCT	cca	agg	ata	acg ™h∽	Cor	aga Ara	aca Thr	Acn	Gln	Tlo	Lve	Tle	Thr	Phe	. 545
245	TTE	Pro	Pro	Arg	140	TIII	ser	ALG	1111	145	GIII	110	nys	110	150	1110	
246 248	224	+a+	a t	αac		+++	ata	αca	aaa		σσα	ttc	aaσ	att		tat	593
249	Lvs	Ser	Asp	Asp	Tvr	Phe	Val	Ala	Lys	Pro	Gly	Phe	Lys	Ile	Tyr	Tyr	
250	1,5	001		155	- 2 -				160		•		-	165		_	
252	tca	ttt	gtg	gaa	gat	ttc	caa	ccg	gaa	gca	gcc	tca	gag	acc	aac	tgg	641
253	Ser	Phe	Val	Glu	Asp	Phe	Gln	${\tt Pro}$	Glu	Ala	Ala	Ser	Glu	Thr	Asn	Trp	
254			170					175					180				
256	gaa	tca	gtc	aca	agc	tct	ttc	tct	ggg	gtg	tcc	tat	cac	tct	cca	tca	689
257	Glu		Val	Thr	Ser	Ser		Ser	Gly	Val	Ser		His	Ser	Pro	ser	
258		185					190			~~~	a+ ~	195	222	20+	ata	aa.	737
261	ata	acg	gac	CCC	act	CTC	act mb~	yor.	gat Asp	ycc λla	Lou	yac Aen	T.vc	Thr	Val	Δla	737
262	200	THE	Asp	PIO	TIII	205	1111	Ата	мар	Ala	210	тэр	Буз	1111	<b>,</b> u _	215	
263 265	722	ttc	αat	acc	ata		σat.	cta	ctt	aaσ		ttc	aat	cca	ata		785
266	Glu	Phe	Asp	Thr	Val	Glu	Asp	Leu	Leu	Lys	His	Phe	Asn	Pro	Val	Ser	
267	014	1 110	e		220					225					230		
269	tqq	caa	gat	gat	ctg	gag	aat	ttg	tat	ctg	gac	acc	cct	cat	tat	aga	833
270	Trp	Gln	Asp	Asp	Leu	Glu	Asn	Leu	Tyr	Leu	Asp	Thr	Pro	His	Tyr	Arg	
271	_			235					240					245			
273	ggc	agg	tca	tac	cat	gat	cgg	aag	tcc	aaa	gtg	gac	ctg	gac	agg	ctc	881
274	Gly	Arg		Tyr	His	Asp	Arg		Ser	Lys	Val	Asp		Asp	Arg	Leu	
275			250					255	<b>.</b>				260		+ -+	~+ ~	. 929
277	aat	gat	gat	gtc	aag	cgt	tac	agt	tgc	act mb~	CCC	agg	aat Acn	Uic	Cor	g Lg Val	. 929
278	Asn	_	Asp	vaı	ьys	Arg	270	ser	Cys	TIII	PIO	275	ASII	птэ	261	Val	
279 281	220	265 ctc	ann	aaa	σασ	cta		cta	acc	aat	gca		ttc	ttc	cca	cga	977
282	Agn	Len	Ara	Glu	Glu	Leu	Lvs	Leu	Thr	Asn	Ala	Val	Phe	Phe	Pro	Arq	
283	280	LCu	*** 9	0_u	0	285	_1.				290					295	
285		ctc	ctc	gtg	cag	cgc	tgt	ggt	ggc	aac	tgt	ggt	tgc	gga	act	gtc	1025
286	Cys	Leu	Leu	Val	Gln	Arg	Cys	Gly	Gly	Asn	Cys	Gly	Cys	Gly	Thr	Val	
287					300					305					310		
289	aac	tgg	aag	tcc	tgc	aca	tgc	agc	tca	ggg	aag	aca	gtg	aag	aag	tat	1073
290	Asn	$\mathtt{Trp}$	Lys						Ser		Lys	Thr	Val		Lys	Tyr	
291									320					325	~~~	222	1121
293	cat	gag	gta	ttg	aag	חשם	gag	CCT	gga Gly	Uic	Dho	Tyc	Ara	Ara	Glv	aaa T.ve	1121
294 295	HIS	GIU	330	ьeu	гуѕ	Pile	GIU	335	СТУ	птэ	FIIE	Буз	340	пту	GLY	цуб	
295 297	act	aan		atα	act	ctt	att		atc	саσ	cta	σat.		cat	gag	cga	1169
298	Δla	Lvs	Asn	Met	Ala	Leu	Val	Asp	Ile	Gln	Leu	Asp	His	His	Glu	Arq	
299		345					350	<u>F</u>		<b>-</b>		355	_			-	
302	tqt		tqt	atc	tgc	agc	tca	aga	cca	cct	cga	taa	aac	acta	tgc		1215
303	Cys	Āsp	Cys	Ile	Cys	Ser	Ser	Arg	Pro	Pro	Arg	*					
304	360		-			365					370						
306	aca	tctg	tac	tttg	atta	tg a	aagg	acct	t ta	ggtt	acaa	aaa	ccct	aag	aagc	ttctaa	1275

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/039,847A

DATE: 07/02/2002 TIME: 10:15:47

Input Set : A:\00-100.txt

Output Set: N:\CRF3\07022002\J039847A.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date